

#### ABSTRACT OF THE DISCLOSURE

This invention provides a printhead capable of decreasing the ON resistance value without increasing the heater board size in order to downsize the heater board,

5    an image printing apparatus using the printhead, and a control method therefor. In the printhead, heater resistors are series-connected to normal MOS transistors in each group on a heat board. The pitch of the heater resistors and the pitch of the normal MOS transistors are

10   designed equal to each other in order to shorten the connection line. One high-breakdown-voltage MOS transistor is arranged in each group, and the pitch is designed to a length corresponding to the product of the pitch of the heater resistors and the number  $x$  of heater

15   resistors. The high-breakdown-voltage MOS transistor has a higher ON resistance value per unit area than that of the normal MOS transistor. However, the area of the high-breakdown-voltage MOS transistor is larger by  $x$  times than that of the normal MOS transistor. This can suppress

20   the ON resistance of the high-breakdown-voltage MOS transistor satisfactorily low.